

1430 Peavine Rd.
Reno NV 89503-1321
September 30, 2001

RECEIVED

OCT 05 2001

Carol Hanlon
S&ER Products Manager
U. S. Department of Energy
Yucca Mountain Site Characterization Office
P.O. Box 30307 M/S 025
North Las Vegas, NV 89036-0707

**Re: Comments on Preliminary Site Suitability Decision for Yucca Mountain
Nuclear Waste Repository**

Dear Ms. Hanlon,

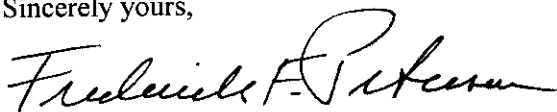
After studying the *Yucca Mountain Preliminary Site Suitability Evaluation* report (DOE RW-0504), and thinking about the many arguments and facts I have heard and read over the years, I recommend that we proceed to final design and use of this nuclear waste repository. I also recommend that its final design allow retrieval and exchange of waste in the future so we might reprocess and reuse the waste to gain more electrical energy and reduce the waste load; we might even be able to reduce excess weapons-grade plutonium and uranium while recovering energy.

I am particularly impressed with the engineered barrier system proposed to additionally isolate the waste packages in a geological site that already has the advantages of distance above the water table, aridity, and relative geographic isolation. All of my experience studying soil formation and features on young to ancient land surfaces in the western USA suggests that the engineered barrier system will indeed limit movement of any escaped radionuclides to very slow diffusion.

Although I have lived in Nevada for some 34 years, and had seen the Nevada Test Site on geological tours, my close technical interest in the Yucca Mountain repository site started only in the latter 1980s, when I did a few weeks' field consulting on soils and geomorphology in Crater Flat for the Nevada Bureau of Mines & Geology's review of U.S. Geological Survey mapping there; this work was funded through the State of Nevada's Yucca Mountain office. I did not participate in any of the estimates of earthquake hazards. Additionally, I have been able to quiz my son, who is Chairman of the Nuclear Engineering Department at U. C. Berkeley, on interesting technical questions.

As an interested citizen with some familiarity with scientific research and technology, I am very positively impressed with the scope, intensity, interdisciplinary cooperation, and general *objectivity* of the Yucca Mountain repository studies over all these years. I think we can reasonably trust it will be one of the safer elements of our energy production system.

Sincerely yours,



Frederick F. Peterson
Emeritus Professor of Soil Science
University of Nevada, Reno

1